

period.<sup>421</sup> However, BellSouth argues that the industry, not the Commission, should determine when the clearinghouse should be dissolved.<sup>422</sup> API argues that such a sunset provision unfairly penalizes those entities involved in subsequent negotiations, because it shortens the period during which parties may secure reimbursement.<sup>423</sup> Finally, commenters request us to clarify that, if the clearinghouse is dissolved, any subsequent licensees that are paying their portion of relocation costs on an installment basis must continue the payments until the obligation is satisfied.<sup>424</sup>

47. Discussion. Because most commenters expressed support for our proposal, we conclude that the cost-sharing plan should sunset for all PCS licensees on April 4, 2005, which is ten years after the date that voluntary negotiations commenced for A and B block licensees.<sup>425</sup> We believe that a sunset date is necessary, because the clearinghouse will operate as a non-profit entity that exists for a limited purpose and should be dissolved on a date certain. Furthermore, we conclude that this time period is sufficient for all licensees to complete most relocation agreements, including those in the C, D, E, and F blocks licensees which will be licensed in the near future. This ten-year period also roughly coincides with the initial PCS license terms and the ten-year depreciation period built into the cost-sharing formula. We also believe that the vast majority of links will need to be relocated before the ten-year sunset date in order for PCS licensees to meet their coverage requirements. However, the sunset date will not eliminate the existing obligations of PCS licensees that are paying their portion of relocation costs on an installment basis. We agree with those commenters who argue that such licensees should be required to continue making payments directly to the PCS relocater until the obligation is satisfied.<sup>426</sup> Finally, we clarify that reimbursement obligations will be subject to the same formula, *i.e.*, depreciation will not be accelerated, even if the link is relocated shortly before the sunset date.

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<sup>421</sup> AT&T Reply Comments at 12; PacBell Comments at 4; PCIA Comments at 38; TIA Comments at 9; UTAM Comments at 11-12; and Western Comments at 9.

<sup>422</sup> BellSouth Comments at 16.

<sup>423</sup> API Comments at 9.

<sup>424</sup> See, e.g., PacBell Comments at 4; BellSouth Reply Comments at 20.

<sup>425</sup> AT&T Reply Comments at 12; PacBell Comments at 4; PCIA Comments at 38; TIA Comments at 9; UTAM Comments at 11-12; and Western Comments at 9.

<sup>426</sup> See, e.g., PacBell Comments at 4; BellSouth Reply Comments at 20.

## APPENDIX B

1. Part 15 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

### **PART 15 -- RADIO FREQUENCY DEVICES**

2. The authority citation for Part 15 is revised to read as follows:

**Authority:** Secs. 4, 302, 303, 304, 307 and 624A of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 302, 303, 304, 307 and 544A.

3. Section 15.307 is amended by revising paragraphs (a), (f) and (g) to read as follows:

#### **§ 15.307 Coordination with fixed microwave service.**

(a) UTAM, Inc. is designated to coordinate and manage the transition of the 1910-1930 MHz band from the Private Operational-Fixed Microwave Service (OFS) operating under Part 101 of this chapter to unlicensed PCS operations, \* \* \*

\* \* \* \* \*

(f) At such time as the Commission deems that the need for coordination between unlicensed PCS operations and existing Part 101 Private Operational-Fixed Microwave Services ceases to exist, the disabling mechanism required by paragraph (e) of this section will no longer be required.

(g) Operations under the provisions of this subpart are required to protect systems in the Private Operational-Fixed Microwave Service operating within the 1850-1990 MHz band until the dates and conditions specified in §§ 101.69 through 101.73 of this chapter for termination of primary status. Interference protection is not required for Part 101 stations in this band licensed on a secondary basis.

\* \* \* \* \*

4. Part 22 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

### **PART 22 -- PUBLIC MOBILE SERVICES**

5. The authority citation for Part 22 is revised to read as follows:

**Authority: 47 U.S.C. §§ 154, 303, unless otherwise noted.**

6. Section 22.602 is amended to read as follows:

**§ 22.602 Transition of the 2110-2130 and 2160-2180 MHz channels to emerging technologies.**

The microwave channels listed in § 22.591 have been allocated for use by emerging technologies (ET) services. No new systems will be authorized under this part. The rules in this section provide for a transition period during which existing Paging and Radiotelephone Service (PARS) licensees using these channels may relocate operations to other media or to other fixed channels, including those in other microwave bands. For PARS licensees relocating operations to other microwave bands, authorization must be obtained under Part 101 of this chapter.

(a) Licensees proposing to implement ET services may negotiate with PARS licensees authorized to use these channels, for the purpose of agreeing to terms under which the PARS licensees would -

(1) Relocate their operations to other fixed microwave bands or other media, or alternatively,

(2) Accept a sharing arrangement with the ET licensee that may result in an otherwise impermissible level of interference to the PARS operations.

(b) PARS operations on these channels will continue to be co-primary with other users of this spectrum until two years after the FCC commences acceptance of applications for ET services, and until one year after an ET licensee initiates negotiations for relocation of the fixed microwave licensee's operations.

(c) Voluntary Negotiations. During the two year voluntary negotiation period, negotiations are strictly voluntary and are not defined by any parameters. However, if the parties have not reached an agreement within one year after the commencement of the voluntary period, the PARS licensee must allow the ET licensee (if it so chooses) to gain access to the existing facilities to be relocated so that an independent third party can examine the PARS licensee's 2 GHz system and prepare an estimate of the cost and the time needed to relocate the PARS licensee to comparable facilities. The ET licensee must pay for any such estimate.

(d) Mandatory Negotiations. If a relocation agreement is not reached during the two

year voluntary period, the ET licensee may initiate a mandatory negotiation period. This mandatory period is triggered at the option of the ET licensee, but ET licensees may not invoke their right to mandatory negotiation until the voluntary negotiation period has expired. Once mandatory negotiations have begun, a PARS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. In evaluating claims that a party has not negotiated in good faith, the FCC will consider, *inter alia*, the following factors:

(1) whether the ET licensee has made a *bona fide* offer to relocate the PARS licensee to comparable facilities in accordance with Section 101.75(b);

(2) if the PARS licensee has demanded a premium, the type of premium requested (*e.g.*, whether the premium is directly related to relocation, such as system-wide relocations and analog-to-digital conversions, versus other types of premiums), and whether the value of the premium as compared to the cost of providing comparable facilities is disproportionate (*i.e.* whether there is a lack of proportion or relation between the two);

(3) what steps the parties have taken to determine the actual cost of relocation to comparable facilities;

(4) whether either party has withheld information requested by the other party that is necessary to estimate relocation costs or the facilitate the relocation process.

Any party alleging a violation of our good faith requirement must attach an independent estimate of the relocation costs in question to any documentation filed with the Commission in support of its claim. An independent cost estimate must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.

(e) Involuntary period. After the periods specified in paragraph (b) of this section have expired, ET licensees may initiate involuntary relocation procedures under the Commission's rules. ET licensees are obligated to pay to relocate only the specific microwave links to which their systems pose an interference problem. Under involuntary relocation, a PARS licensee is required to relocate, provided that:

(1) The ET applicant, provider, licensee or representative guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the PARS licensee that are directly attributable to an involuntary relocation, subject to a cap of two percent of the hard costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. ET licensees are not required to pay PARS licensees for internal resources devoted to the relocation process. ET licensees are not required to pay for transaction costs incurred by PARS licensees during the voluntary or

mandatory periods once the involuntary period is initiated or for fees that cannot be legitimately tied to the provision of comparable facilities;

(2) The ET applicant, provider, licensee or representative completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are involved, identifying and obtaining, on the incumbents behalf, new channels and frequency coordination; and,

(3) The ET applicant, provider, licensee or representative builds the replacement system and tests it for comparability with the existing 2 GHz system.

(f) Comparable Facilities. The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing PARS system with respect to the following three factors:

(1) Throughput. Communications throughput is the amount of information transferred within a system in a given amount of time. If analog facilities are being replaced with analog, the ET licensee is required to provide the PARS licensee with an equivalent number of 4 kHz voice channels. If digital facilities are being replaced with digital, the ET licensee must provide the PARS licensee with equivalent data loading bits per second (bps). ET licensees must provide PARS licensees with enough throughput to satisfy the PARS licensee's system use at the time of relocation, not match the total capacity of the PARS system.

(2) Reliability. System reliability is the degree to which information is transferred accurately within a system. ET licensees must provide PARS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital voice transmissions, it is measured by the percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) Operating Costs. Operating costs are the cost to operate and maintain the PARS system. ET licensees must compensate PARS licensees for any increased recurring costs associated with the replacement facilities (e.g. additional rental payments, increased utility fees) for five years after relocation. ET licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the PARS licensee must be equivalent to the 2 GHz system in order for the replacement system to be considered comparable.

(g) The PARS licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(h) Twelve-Month Trial Period. If, within one year after the relocation to new facilities, the PARS licensee demonstrates that the new facilities are not comparable to the former facilities, the ET applicant, provider, licensee or representative must remedy the defects or pay to relocate the PARS licensee to one of the following: its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (f) of this section. This trial period commences on the date that the PARS licensee begins full operation of the replacement link. If the PARS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months.

(i) After April 25, 1996, all major modifications and extensions to existing PARS systems operating on channels in the 2110-2130 and 2160-2180 MHz bands will be authorized on a secondary basis to future ET operations. All other modifications will render the modified PARS license secondary to future ET operations unless the incumbent affirmatively justifies primary status and the incumbent PARS licensee establishes that the modification would not add to the relocation costs of ET licensees. Incumbent PARS licensees will maintain primary status for the following technical changes:

- (1) decreases in power;
- (2) minor changes (increases or decreases) in antenna height;
- (3) minor location changes (up to two seconds);
- (4) any data correction which does not involve a change in the location of an existing facility;
- (5) reductions in authorized bandwidth;
- (6) minor changes (increases or decreases) in structure height;
- (7) changes (increases or decreases) in ground elevation that do not affect centerline height;
- (8) minor equipment changes.

(j) Sunset. PARS licensees will maintain primary status in the 2110-2130 and 2160-2180 MHz bands unless and until an ET licensee requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.* ten years after the voluntary period begins for the first ET licensees in the service). Once the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA Bulletin 10-F or any standard successor. ET licensee notification to the affected PARS licensee must be in writing and must provide the incumbent

with no less than six months to vacate the spectrum. After the six-month notice period has expired, the PARS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the PARS licensee to continue to operate on a mutually agreed upon basis. If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

(1) it cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available), and;

(2) the public interest would be harmed if the incumbent is forced to terminate operations (*e.g.*, if public safety communications services would be disrupted).

7. Part 24 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

#### **PART 24 -- PERSONAL COMMUNICATIONS SERVICES**

8. The authority citation for Part 24 is revised to read as follows:

**Authority:** 47 U.S.C. §§ 154, 301, 302, 303, 309 and 332, unless otherwise noted.

9. Section 24.5 is amended by adding the definitions for "PCS Relocator" and "UTAM" in alphabetical order to read as follows:

#### **§ Definitions.**

\* \* \* \* \*

*PCS Relocator.* A PCS entity that pays to relocate a fixed microwave link from its existing 2 GHz facility to other media or other fixed channels.

*UTAM.* The Unlicensed PCS Ad Hoc Committee for 2 GHz Microwave Transition and Management, which coordinates relocation in the 1910-1930 MHz band.

10. Section 24.237 is amended by revising paragraph (c) to read as follows:

#### **§ 24.237 Interference protection.**

\* \* \* \* \*

(c) In all other respects, coordination procedures are to follow the requirements of §

101.103(d) of this chapter to the extent that these requirements are not inconsistent with those specified in this part.

\* \* \* \* \*

11. Subpart E is amended by adding a new heading following Section 24.238 to read as follows:

**POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 1850-1990 MHz BAND**

12. A new Section 24.239 is added to Subpart E to read as follows:

**§ 24.239 Cost-Sharing Requirements for Broadband PCS.**

Frequencies in the 1850-1990 MHz band listed in § 101.147(c) have been allocated for use by PCS. In accordance with procedures specified in §§ 101.69 through 101.81, PCS entities (both licensed and unlicensed) are required to relocate the existing Fixed Microwave Services (FMS) licensees in these bands if interference to the existing FMS operations would occur. All PCS entities who benefit from spectrum clearance by other PCS entities must contribute to such relocation costs. PCS entities may satisfy this requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 24.243. However, PCS entities are required to reimburse other PCS entities that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 24.241) from PCS entities that are not parties to the agreement. The cost-sharing plan is in effect during all phases of microwave relocation specified in § 101.69.

13. A new Section 24.241 is added to Subpart E to read as follows:

**§ 24.241 Administration of the Cost-Sharing Plan.**

The Wireless Telecommunications Bureau, under delegated authority, will select an entity to operate as a neutral, not-for-profit clearinghouse. This clearinghouse will administer the cost-sharing plan by, *inter alia*, maintaining all of the cost and payment records related to the relocation of each link and determining the cost-sharing obligation of subsequent PCS entities. The cost-sharing rules will not take effect until an administrator is selected.

14. A new Section 24.243 is added to Subpart E to read as follows:

**§ 24.243 The Cost-Sharing Formula.**

A PCS relocater who relocates an interfering microwave link, *i.e.* one that is in all or part of its market area and in all or part of its frequency band, is entitled to *pro rata* reimbursement



based on the following formula:

$$R_N = \frac{C}{N} \times \frac{[120 - (T_m)]}{120}$$

(a)  $R_N$  equals the amount of reimbursement.

(b)  $C$  equals the actual cost of relocating the link (up to the reimbursement cap). Actual relocation costs include, but are not limited to, such items as: radio terminal equipment (TX and/or RX - antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning costs; training; disposal of old equipment; test equipment (vendor required); spare equipment; project management; prior coordination notification under Section 101.103(d) of the Commission's rules; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; and leased facilities.  $C$  also includes incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the "hard" costs involved.  $C$  may not exceed \$250,000 per link, with an additional \$150,000 permitted if a new or modified tower is required.

(c)  $N$  equals the number of PCS entities that would have interfered with the link. For the PCS relocater,  $N = 1$ . For the next PCS entity that would have interfered with the link,  $N=2$ , and so on.

(d)  $T_m$  equals the number of months that have elapsed between the month the PCS relocater obtains reimbursement rights and the month that the clearinghouse notifies a later-entrant of its reimbursement obligation. A PCS relocater obtains reimbursement rights on the date that it signs a relocation agreement with a microwave incumbent.

15. A new Section 24.245 is added to Subpart E to read as follows:

**§ 24.245 Reimbursement under the Cost-Sharing Plan.**

(a) Registration of Reimbursement Rights. To obtain reimbursement, a PCS relocater must submit documentation of the relocation agreement to the clearinghouse within ten business days of the date a relocation agreement is signed with an incumbent. If the clearinghouse has not yet been selected, the PCS relocater will be responsible for submitting documentation of the relocation agreement within ten business days of the date that the Wireless Telecommunications Bureau issues a public notice announcing that the clearinghouse has been established and has begun operation.

(b) Documentation of Expenses. Once relocation occurs, the PCS relocater must submit documentation itemizing the amount spent for items listed in paragraph (b) of § 24.243. The PCS relocater must identify the particular link associated with appropriate expenses (*i.e.*, costs may not be averaged over numerous links). If a PCS relocater pays a microwave incumbent a monetary sum to relocate its own facilities, the PCS relocater must estimate the costs associated with relocating the incumbent by itemizing the anticipated cost for items listed in paragraph (b) of § 24.243. If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement. A PCS relocater may submit receipts or other documentation to the clearinghouse for all relocation expenses incurred since April 5, 1995.

(c) Full Reimbursement. A PCS relocater who relocates a microwave link that is either fully outside its market area or its licensed frequency band may seek full reimbursement through the clearinghouse of compensable costs, up to the reimbursement cap as defined in §24.243(b). Such reimbursement will not be subject to depreciation under the cost-sharing formula.

16. A new Section 24.247 is added to Subpart E to read as follows:

**§ 24.247 Triggering a Reimbursement Obligation.**

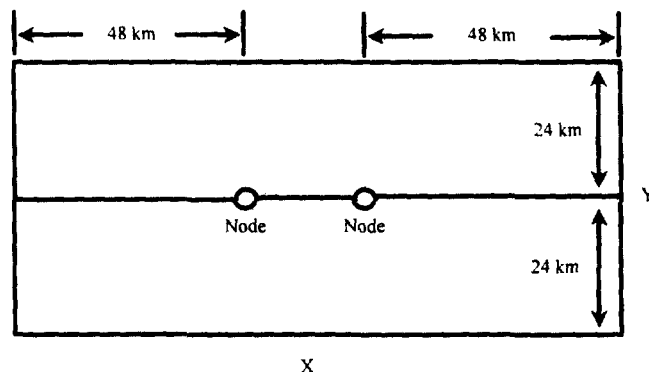
(a) Licensed PCS. The clearinghouse will apply the following test to determine if a PCS entity preparing to initiate operations must pay a PCS relocater in accordance with the formula detailed in § 24.243:

(1) all or part of the relocated microwave link was initially co-channel with the licensed PCS band(s) of the subsequent PCS entity;

(2) a PCS relocater has paid the relocation costs of the microwave incumbent;  
and

(3) the subsequent PCS entity is preparing to turn on a fixed base station at commercial power and the fixed base station is located within a rectangle (Proximity Threshold) described as follows:

The length of the rectangle shall be  $x$  where  $x$  is a line extending through both nodes of the microwave link to a distance of 48 kilometers (30 miles) beyond each node. The width of the rectangle shall be  $y$  where  $y$  is a line perpendicular to  $x$  and extending for a distance of 24 kilometers (15 miles) on both sides of  $x$ . Thus, the rectangle is represented as follows:



If the application of the Proximity Threshold test indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the subsequent PCS entity of the total amount of its reimbursement obligation.

(b) Unlicensed PCS. UTAM's reimbursement obligation is triggered either:

(1) when a county is cleared of microwave links in the unlicensed allocation, and UTAM invokes a Zone 1 power cap as a result of third party relocation activities; or

(2) a county is cleared of microwave links in the unlicensed allocation and UTAM reclassifies a Zone 2 county to Zone 1 status.

17. A new Section 24.249 is added to Subpart E to read as follows:

**§ 24.249 Payment Issues.**

(a) Timing. On the day that a PCS entity files its prior coordination notice (PCN) in accordance with §101.103(d), it must file a copy of the PCN with the clearinghouse. The clearinghouse will determine if any reimbursement obligation exists and notify the PCS entity in writing of its repayment obligation, if any. When the PCS entity receives a written copy of such obligation, it must pay directly to the PCS relocater the amount owed within thirty days, with the exception of those businesses that qualify for installment payments. A business that qualifies for an installment payment plan must make its first installment payment within thirty days of notice from the clearinghouse. UTAM's first payment will be due thirty days after its reimbursement obligation is triggered as described in § 24.247(b).

(b) Eligibility for Installment Payments. PCS licensees that are allowed to pay for

their licenses in installments under our designated entity rules will have identical payment options available to them with respect to payments under the cost-sharing plan. The specific terms of the installment payment mechanism, including the treatment of principal and interest, are the same as those applicable to the licensee's installment auction payments. If, for any reason, the entity eligible for installment payments is no longer eligible for such installment payments on its license, that entity is no longer eligible for installment payments under the cost-sharing plan. UTAM may make quarterly payments over a five-year period with an interest rate of prime plus 2.5 percent. UTAM may also negotiate separate repayment arrangements with other parties.

18. A new Section 24.251 is added to Subpart E to read as follows:

**§ 24.251 Dispute Resolution Under the Cost-Sharing Plan.**

Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited ADR procedures, such as binding arbitration, mediation, or other ADR techniques.

19. A new Section 24.253 is added to Subpart E to read as follows:

**§ 24.253 Termination of Cost-Sharing Obligations.**

The cost-sharing plan will sunset for all PCS entities on April 4, 2005, which is ten years after the date that voluntary negotiations commenced for A and B block PCS entities. Those PCS entities that are paying their portion of relocation costs on an installment basis must continue the payments until the obligation is satisfied.

20. Part 101 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

**PART 101 -- FIXED MICROWAVE SERVICES**

21. The authority citation for Part 101 is revised to read as follows:

**Authority: 47 U.S.C. §§ 154, 303, unless otherwise noted.**

22. Section 101.3 is amended by adding the definition for "Secondary Operations" in alphabetical order to read as follows:

**§ 101.3 Definitions.**

\* \* \* \* \*

*Secondary Operations.* Radio communications which may not cause interference to operations authorized on a primary basis and which are not protected from interference from these primary operations.

\* \* \* \* \*

23. Subpart B is amended by adding a new heading following Section 101.67 to read as follows:

**POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 1850-1990 AND 2110-2200 MHZ BANDS**

24. Section 101.69 is amended by revising the title and the text to read as follows:

**§ 101.69 Transition of the 1850-1990 and 2110-2200 MHz bands from the Fixed Microwave Services to Personal Communications Services and emerging technologies.**

Fixed Microwave Services (FMS) frequencies in the 1850-1990 and 2110-2200 MHz bands listed in §§ 101.147(c), (d) and (e) have been allocated for use by emerging technology (ET) services, including Personal Communications Services (PCS). The rules in this section provide for a transition period during which ET licensees may relocate existing FMS licensees using these frequencies to other media or other fixed channels, including those in other microwave bands.

(a) ET licensees may negotiate with FMS licensees authorized to use frequencies in the 1850-1990 and 2110-2200 MHz bands, for the purpose of agreeing to terms under which the FMS licensees would -

(1) Relocate their operations to other fixed microwave bands or other media, or alternatively,

(2) Accept a sharing arrangement with the ET licensee that may result in an otherwise impermissible level of interference to the FMS operations.

(b) FMS operations in the 1850-1990 and 2110-2200 MHz bands, with the exception of public safety facilities defined in § 101.77, will continue to be co-primary with other users of this spectrum until two years after the FCC commences acceptance of applications for ET services (voluntary negotiation period), and until one year after an ET licensee initiates negotiations for relocation of the fixed microwave licensee's operations (mandatory negotiation period). In the 1910-1930 MHz band allocated for unlicensed PCS, FMS

operations will continue to be co-primary until one year after UTAM, Inc. initiates negotiations for relocation of the fixed microwave licensee's operations. Public safety facilities defined in § 101.77 will continue to be co-primary in these bands until three years after the Commission commences acceptance of applications for an emerging technology service (voluntary negotiation period), and until two years after an emerging technology service licensee or an emerging technology unlicensed equipment supplier or representative initiates negotiations for relocation of the fixed microwave licensee's operations (mandatory negotiation period). If no agreement is reached during either the voluntary or mandatory negotiation periods, an ET licensee may initiate involuntary relocation procedures. Under involuntary relocation, the incumbent is required to relocate, provided that the ET licensee meets the conditions of § 101.75.

24. A new Section 101.71 is added to Subpart B to read as follows:

**§ 101.71 Voluntary Negotiations.**

During the two or three year voluntary negotiation period, negotiations are strictly voluntary and are not defined by any parameters. However, if the parties have not reached an agreement within one year after the commencement of the voluntary period, the FMS licensee must allow the ET licensee (if it so chooses) to gain access to the existing facilities to be relocated so that an independent third party can examine the FMS licensee's 2 GHz system and prepare an estimate of the cost and the time needed to relocate the FMS licensee to comparable facilities. The ET licensee must pay for any such estimate.

26. A new Section 101.73 is added to Subpart B to read as follows:

**§ 101.73 Mandatory Negotiations.**

(a) If a relocation agreement is not reached during the two or three year voluntary period, the ET licensee may initiate a mandatory negotiation period. This mandatory period is triggered at the option of the ET licensee, but ET licensees may not invoke their right to mandatory negotiation until the voluntary negotiation period has expired.

(b) Once mandatory negotiations have begun, an FMS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. In evaluating claims that a party has not negotiated in good faith, the FCC will consider, *inter alia*, the following factors:

(1) whether the ET licensee has made a *bona fide* offer to relocate the FMS licensee to comparable facilities in accordance with Section 101.75(b);

(2) if the FMS licensee has demanded a premium, the type of premium requested (*e.g.*, whether the premium is directly related to relocation, such as system-wide

relocations and analog-to-digital conversions, versus other types of premiums), and whether the value of the premium as compared to the cost of providing comparable facilities is disproportionate (*i.e.* whether there is a lack of proportion or relation between the two);

(3) what steps the parties have taken to determine the actual cost of relocation to comparable facilities;

(4) whether either party has withheld information requested by the other party that is necessary to estimate relocation costs or to facilitate the relocation process.

(c) Any party alleging a violation of our good faith requirement must attach an independent estimate of the relocation costs in question to any documentation filed with the Commission in support of its claim. An independent cost estimate must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.

27. A new Section 101.75 is added to Subpart B to read as follows:

**§ 101.75 Involuntary Relocation Procedures.**

(a) If no agreement is reached during either the voluntary or mandatory negotiation period, an ET licensee may initiate involuntary relocation procedures under the Commission's rules. ET licensees are obligated to pay to relocate only the specific microwave links to which their systems pose an interference problem. Under involuntary relocation, the FMS licensee is required to relocate, provided that the ET licensee:

(1) Guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the FMS licensee that are directly attributable to an involuntary relocation, subject to a cap of two percent of the hard costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. ET licensees are not required to pay FMS licensees for internal resources devoted to the relocation process. ET licensees are not required to pay for transaction costs incurred by FMS licensees during the voluntary or mandatory periods once the involuntary period is initiated, or for fees that cannot be legitimately tied to the provision of comparable facilities;

(2) Completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave frequencies and frequency coordination; and

(3) Builds the replacement system and tests it for comparability with the existing 2 GHz system.

(b) Comparable Facilities. The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing FMS system with respect to the following three factors:

(1) Throughput. Communications throughput is the amount of information transferred within a system in a given amount of time. If analog facilities are being replaced with analog, the ET licensee is required to provide the FMS licensee with an equivalent number of 4 kHz voice channels. If digital facilities are being replaced with digital, the ET licensee must provide the FMS licensee with equivalent data loading bits per second (bps). ET licensees must provide FMS licensees with enough throughput to satisfy the FMS licensee's system use at the time of relocation, not match the total capacity of the FMS system.

(2) Reliability. System reliability is the degree to which information is transferred accurately within a system. ET licensees must provide FMS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital voice transmissions, it is measured by the percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) Operating Costs. Operating costs are the cost to operate and maintain the FMS system. ET licensees must compensate FMS licensees for any increased recurring costs associated with the replacement facilities (e.g. additional rental payments, increased utility fees) for five years after relocation. ET licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the FMS licensee must be equivalent to the 2 GHz system in order for the replacement system to be considered comparable.

(c) The FMS licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(d) Twelve-Month Trial Period. If, within one year after the relocation to new facilities, the FMS licensee demonstrates that the new facilities are not comparable to the former facilities, the ET licensee must remedy the defects or pay to relocate the microwave licensee to one of the following: its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (b) of this section. This trial period commences on the date that the FMS licensee begins full operation of the replacement link. If the FMS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months.



28. A new Section 101.77 is added to Subpart B to read as follows:

**§ 101.77 Public Safety Licensees in the 1850-1990 and 2110-2200 MHz bands.**

(a) Public safety facilities are subject to the three-year voluntary and two-year mandatory negotiation period. In order for public safety licensees to qualify for extended negotiation periods, the department head responsible for system oversight must certify to the ET licensee requesting relocation that:

(1) the agency is a licensee in the Police Radio, Fire Radio, Emergency Medical, Special Emergency Radio Services, or that it is a licensee of other Part 101 facilities licensed on a primary basis under the eligibility requirements of Part 90, Subparts B and C; and

(2) the majority of communications carried on the facilities at issue involve safety of life and property.

(b) A public safety licensee must provide certification within thirty (30) days of a request from a ET licensee, or the ET licensee may presume that special treatment is inapplicable. If a public safety licensee falsely certifies to an ET licensee that it qualifies for the extended time periods, this licensee will be in violation of the Commission's rules and will subject to appropriate penalties, as well as immediately subject to the non-public safety time periods.

29. A new Section 101.79 is added to Subpart B to read as follows:

**§ 101.79 Sunset provisions for licensees in the 1850-1990 and 2110-2200 MHz bands.**

(a) FMS licensees will maintain primary status in the 1850-1990 and 2110-2200 MHz bands unless and until an ET licensee requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.* ten years after the voluntary period begins for the first ET licensees in the service). Once the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA Bulletin 10-F or any standard successor. ET licensee notification to the affected FMS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the FMS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the FMS licensee to continue to operate on a mutually agreed upon basis.

(b) If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

(1) it cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available), and;

(2) the public interest would be harmed if the incumbent is forced to terminate operations (*e.g.*, if public safety communications services would be disrupted).

30. A new Section 101.81 is added to Subpart B to read as follows:

**§ 101.81 Future licensing in the 1850-1990 and 2110-2200 MHz bands.**

After April 25, 1996, all major modifications and extensions to existing FMS systems in the 1850-1990 and 2110-2200 MHz bands will be authorized on a secondary basis to ET systems. All other modifications will render the modified FMS license secondary to ET operations, unless the incumbent affirmatively justifies primary status and the incumbent FMS licensee establishes that the modification would not add to the relocation costs of ET licensees. Incumbent FMS licensees will maintain primary status for the following technical changes:

- (a) decreases in power;
- (b) minor changes (increases or decreases) in antenna height;
- (c) minor location changes (up to two seconds);
- (d) any data correction which does not involve a change in the location of an existing facility;
- (e) reductions in authorized bandwidth;
- (f) minor changes (increases or decreases) in structure height;
- (g) changes (increases or decreases) in ground elevation that do not affect centerline height;
- (h) minor equipment changes.

31. Section 101.147 is amended by adding footnote 20 to the entries for frequency ranges 1,850 - 1,990, 2,130 - 2,150, 2,150 - 2,160 and 2,180 - 2,200 MHz and revising footnote 20 to read as follows:

**§ 101.147 Frequency assignments.**

- (a) \* \* \*

1,850 - 1,990 MHz /20/

\* \* \*

2,130 - 2,150 MHz /20/ /22/

2,150 - 2,160 MHz /20/ /22/

\* \* \*

2,180 - 2,200 MHz /20/ /22/

\* \* \*

/20/ New facilities in these bands will be licensed only on a secondary basis. Facilities licensed or applied for before January 16, 1992, are permitted to make modifications and minor extensions in accordance with §101.77 and still retain primary status.

\* \* \*

/22/ Frequencies in these bands are for the exclusive use of Private Operational Fixed Point-to-Point Microwave Service (Part 101).

\* \* \*

## **APPENDIX C**

### **LIST OF PARTIES SUBMITTING COMMENTS**

#### **COMMENTS**

Alcatel Network Systems, Inc. (ANS Comments), November 30, 1995  
Alexander Utility Engineering, Inc. (AUE Comments), November 30, 1995  
American Gas Association (AGA Comments), November 30, 1995  
American Petroleum Institute (API Comments), November 30, 1995  
American Public Power Association (APPA Comments), November 30, 1995  
Association of American Railroads (AAR Comments), November 30, 1995  
Association of Public-Safety Communications Officials-International, Inc. (APCO Comments), November 30, 1995  
AT&T Wireless Services, Inc. (AT&T Comments), November 30, 1995  
BellSouth Corporation (BellSouth Comments), November 30, 1995  
Carolina PCS I Limited Partnership (Carolina PCS I), November 30, 1995  
Central Iowa Power Cooperative (CIPCO Comments), November 13, 1995  
City of San Diego (City of San Diego Comments), November 30, 1995  
County of Los Angeles Sheriff's Department and Internal Services Department (County of LA Comments), November 30, 1995  
Cox & Smith, Inc. (Cox & Smith Comments), November 30, 1995  
DCR Communication, Inc (DCR Comments), November 30, 1995  
East River Electric Power Cooperative (East River Comments), November 30, 1995  
GO Communications Corporation (GO Comments), November 30, 1995  
GTE Service Corporation (GTE Comments), November 30, 1995  
Industrial Telecommunications Association, Inc. (ITA Comments) November 30, 1995  
Interstate Natural Gas Association of America (INGAA Comments), November 30, 1995  
Infocore Wireless, Inc. (Infocore Comments), November 30, 1995  
InterCel, Inc. (InterCel Comments), November 30, 1995  
Iowa, L.P. (Iowa L.P. Comments), November 30, 1995  
Kansas Department of Transportation (Kansas DOT Comments), November 30, 1995  
Maine Microwave Associates (Maine Microwave Comments), November 30, 1995  
Minnesota Equal Access Network Services, Inc. (MEANS Comments), November 30, 1995  
National Rural Electric Cooperative Association (NRECA Comments), November 30, 1995  
Omnipoint Communications Inc. (Omnipoint Comments), November 30, 1995  
Pacific Bell Mobil Services (PacBell Comments), November 30, 1995  
PCS PrimeCo., L.P. (PCS PrimeCo Comments), November 30, 1995  
Personal Communications Industry Association (PCIA Comments), November 30, 1995  
South Carolina Public Service Authority (Santee Cooper Comments), November 30, 1995  
Southern California Gas Company (SoCal Comments), November 30, 1995  
Southern Company (Southern Comments), November 30, 1995  
Southwestern Bell Mobile Systems, Inc. (SBMS Comments), November 30, 1995

Sprint Telecommunications Venture (Sprint Comments), November 30, 1995  
Telecommunications Industry Association (TIA Comments), November 30, 1995  
Tenneco Energy (Tenneco Comments), November 30, 1995  
U.S. Airwaves, Inc. (AirWaves Comments), November 30, 1995  
UTAM, Inc. (UTAM Comments), November 30, 1995  
UTC (UTC Comments), November 30, 1995  
Valero Transmission, L.P. (Valero Comments), November 30, 1995  
Western Wireless Corporation (Western Comments), November 30, 1995  
Williams Wireless, Inc. (WWI Comments), November 30, 1995

### **LATE-FILED COMMENTS**

Cellular Telecommunications Industry Association (CTIA Comments), December 1, 1995

### **REPLY COMMENTS**

Alcatel Network Systems, Inc. (ANS Reply Comments), January 11, 1996  
Alexander Utility Engineering, Inc. (AUE Reply Comments), January 11, 1996  
American Petroleum Institute (API Reply Comments), January 11, 1996  
American Public Power Association (APPA Reply Comments), January 11, 1996  
Association of American Railroads (AAR Reply Comments), January 16, 1996  
AT&T Wireless Services, Inc. (AT&T Reply Comments), January 11, 1996  
BellSouth Corporation (BellSouth Reply Comments), January 11, 1996  
Brazos Electric Cooperative (Brazos Reply Comments), January 11, 1996  
Chester Telephone Co., *et. al.* (Chester Telephone Reply Comments), January 16, 1996  
Colorado Springs Utilities (CSU Reply Comments), January 11, 1996  
COMSAT Corporation (COMSAT Reply Comments), January 11, 1996  
Comsearch (Comsearch Reply Comments), January 11, 1996  
Cooperative Power (Cooperative Power Reply Comments), January 11, 1996  
County of Los Angeles Sheriff's Department and Internal Services Department (County of Los Angeles' Comments), January 11, 1996  
DCR Communication, Inc (DCR Reply Comments), January 11, 1996  
Duke Power Company (Duke Power Reply Comments), January 11, 1996  
Entergy Services, Inc. (Entergy Reply Comments), January 11, 1996  
GO Communications Corporation (GO Reply Comments), January 16, 1996  
Keller and Heckman (Keller and Heckman Reply Comments), January 11, 1996  
National Rural Electric Cooperative Association (NRECA Reply Comments), January 16, 1996  
Omaha Public Power District (Omaha Public Power Reply Comments), January 11, 1996  
Omnipoint Communications Inc. (Omnipoint Reply Comments), January 11, 1996  
Pacific Bell Mobil Services (PacBell Reply Comments), January 11, 1996

Personal Communications Industry Association (PCIA Reply Comments), January 11, 1996  
PCS PrimeCo., L.P. (PrimeCo Reply Comments), January 11, 1996  
Southern California Gas Company (SoCal Reply Comments), January 16, 1996  
Southern Company (Southern Reply Comments), January 11, 1996  
Southwestern Bell Mobile Systems, Inc. (SBMS Reply Comments), January 11, 1996  
Sprint Telecommunications Venture (Sprint Reply Comments), January 11, 1996  
SRI PCS Resources, Inc. (SRI Reply Comments), January 11, 1996  
Telecommunications Industry Association (TIA Reply Comments), January 11, 1996  
Tenneco Energy (Tenneco Reply Comments), January 16, 1996  
UTAM, Inc. (UTAM Reply Comments), January 11, 1996  
UTC (UTC Reply Comments), January 16, 1996  
Western Wireless Corporation (Western Reply Comments), January 11, 1996  
Wireless Telephone Company of America (WTCA Reply Comments), January 11, 1996  
Williams Wireless, Inc. (WWI Reply Comments), January 11, 1996

#### **LATE-FILED REPLY COMMENTS**

City of Dallas (City of Dallas Reply Comments), January 18, 1996

Note: *Ex parte* filings are available on the Commission's Record Imaging Processing System.

## APPENDIX D

### INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the policies and rules proposed in this *Further Notice of Proposed Rule Making* (*Further Notice*). Written public comments are requested on the IRFA.

**Reason for Action:** This rulemaking proceeding was initiated to secure comment on whether the negotiation period for the D, E, and F block PCS licensees should be adjusted by shortening the voluntary period by one year (*i.e.*, to one year for non-public safety incumbents and two years for public safety incumbents) and lengthening the mandatory negotiation period for these blocks by a corresponding year (*i.e.*, to two years for non-public safety incumbents and three years for public safety incumbents); whether the negotiation periods for the C block should be subject to the same readjustments as the negotiation periods for the D, E, and F blocks; and whether microwave incumbents should be permitted to seek reimbursement from PCS licensees through the cost-sharing plan. This proposal would facilitate negotiations between the parties and promote the efficient relocation of microwave licensees by encouraging microwave incumbents to relocate their own microwave systems, thus bringing PCS services to the public in a speedy manner.

**Objectives:** Our objective is to facilitate negotiations between PCS licensees and microwave incumbents. This proposal would also enable microwave incumbents who pay to relocate their own links to collect reimbursement from PCS licensees that benefit from the relocation. Cost-sharing is necessary to enhance the speed of relocation and provide an incentive to incumbents to move their own links. This action would result in faster deployment of PCS and delivery of service to the public.

**Legal Basis:** The proposed action is authorized under the Communications Act, Sections 4(i), 7, 303(c), 303(f), 303(g), 303(r), and 332, 47 U.S.C. §§ 154(i), 303(c), 303(f), 303(g), 303(r), 332, as amended.

**Reporting, Recordkeeping, and Other Compliance Requirements:** Under the proposal contained in the *Further Notice*, microwave incumbents who relocate their own links would be required to document the relocation costs paid and report them to a central clearinghouse. Later PCS market entrants would then be required to file a Prior Coordination Notification with the clearinghouse and, if necessary, reimburse the incumbent for relocation expenses.

**Federal Rules Which Overlap, Duplicate or Conflict With These Rules:** None.

**Description, Potential Impact, and Number of Small Entities Involved:** This proposal would benefit small PCS licensees by facilitating negotiations with microwave

incumbents and allowing them to bring their services to market sooner. This proposal would also benefit small microwave incumbents by enabling them to relocate their entire system at once and collect reimbursement from PCS licensees who benefit from the resulting clearance of the spectrum. Such incumbents would therefore benefit from the reduced time and administrative inconvenience involved with relocating links at different times. The 2 GHz fixed microwave bands support a number of industries that provide vital services to the public. We are committed to ensuring that the incumbents' services are not disrupted and that the economic impact of this proceeding on the incumbents is minimal. We must further take into consideration that not all of the incumbent licensees are large businesses, particularly in the bands above 2 GHz, and that many of the licensees are local government entities that are not funded through rate regulation. We believe that this proceeding would further our policy of encouraging rapid deployment of PCS and system-wide relocations of microwave incumbents. After evaluating comments filed in response to the *Further Notice*, the Commission will examine further the impact of all rule changes on small entities and set forth its findings in the Final Regulatory Flexibility Analysis.

***Significant Alternatives Minimizing the Impact on Small Entities Consistent with the Stated Objectives:*** We have reduced burdens wherever possible. The regulatory burdens we have retained are necessary in order to ensure that the public receives the benefits of innovative new services in a prompt and efficient manner. We will continue to examine alternatives in the future with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities.

***IRFA Comments:*** We request written public comment on the foregoing Initial Regulatory Flexibility Analysis. Comments must have a separate and distinct heading designating them as responses to the IRFA and must be filed by the comment deadlines set forth in this *Further Notice*.



## **Statement of Chairman Reed Hundt**

**Re: Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation (FCC 96-196)**

The record in this proceeding indicates that in the vast majority of cases PCS licensees and incumbent fixed microwave licensees are successfully negotiating fair and equitable relocation agreements. There is, however, some evidence that in a small minority of cases negotiations are being stalled by incumbent microwave licensees demanding unreasonable premiums as a condition of relocation. The amendments and clarifications we adopt in this *Report and Order and Further Notice of Proposed Rule Making* are designed to add certainty to the relocation process and facilitate negotiations for early, efficient and equitable relocation of incumbent 2 GHz licensees. I am confident that the action we take today will facilitate the rapid introduction of PCS to the public by expediting the relocation of fixed microwave incumbents without causing any disruption or harm to incumbent operations.

In order to encourage voluntary negotiations for early relocation we have taken the following steps:

- We adopt a cost sharing plan that will encourage system-wide relocation by providing for reimbursement of relocation costs from future PCS licensees.
- One year after the initiation of the voluntary negotiation period, we require microwave incumbents to provide access to their facilities so that an independent estimate can be made of the actual cost of relocating the incumbent to comparable facilities.
- We clarify that in evaluating claims of failure to negotiate in good faith during the mandatory negotiation period we will consider the type of payment demands being made and the proportionality of such payment demands to actual relocation costs.
- We clarify that PCS licensees seeking involuntary relocation must provide facilities that are "comparable" in terms of (1) communications throughput, (2) system reliability, and (3) operating costs.
- We clarify that microwave incumbents still operating in the 2 GHz band ten years after the voluntary period has commenced will be required to pay their own relocation expenses if a PCS licensee requires use of the spectrum.

The relocation rules we adopted in 1993 in ET Docket No. 92-9, established procedures for emerging technology licensees in the 2 GHz band to relocate incumbent microwave licensees to available frequencies in higher bands. This relocation process consists of a two-year voluntary negotiation period (three years for public safety incumbents) and a one-year mandatory negotiation period (two years for public safety), after which the incumbent becomes subject to involuntary relocation provided the PCS licensee pays all cost